

Louisiana Morbidity Report

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David W. Hood SECRETARY

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West Nile Virus Activity, Louisiana

Gary Balsamo, DVM, MPH&TM

As of August 31, 2002, 222 humans have been identified as being infected with the virus of which 142 (64%) had meningoencephalitis, the most severe disease condition associated with West Nile virus and 74 (33%) had West Nile Fever, a milder "influenza"like form of infection characterized by fever and headache as well as arthralgia and myalgia. Remaining patients' syndromes have yet to be determined. The majority of cases occurred in the southeastern part of the state. Table 1 and Figure 1 illustrate the geographic distribution of the human cases. Nine of the ten fatalities reported in Louisiana were in patients 60 years and older. Cases of West Nile virus have been reported in patients ranging in age from four to 94 years, with a mean of 50.4, (Figure 2). Geographic information, travel history, medical case histories, home environment information, and general demographic information are collected on each suspect case. The Infectious Disease Epidemiology Section is presently working with the Centers for Disease Control and Prevention (CDC) in a study of West Nile fever in the Slidell area. CDC is also conducting a serological survey of small mammals (dogs and cats) in eastern St. Tammany parish.

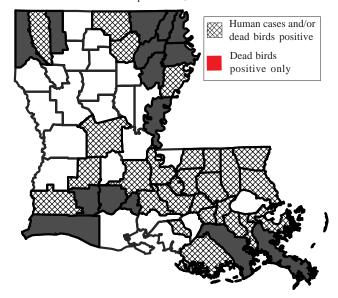
To date, a total of 555 human cases have been reported from 25 states in the US. Forty-one states have reported some form of West Nile virus activity, either in humans, mammals, or in arthropods.

Activity of the virus in horses is also tracked through a cooperative effort among the Louisiana Department of Agriculture and Forestry, the Louisiana Veterinary Medical Diagnostic Laboratory (LVMDL), and the Infectious Disease Epidemiology Section, Office

Region	Description	No. of Cases
1	Greater New Orleans area	38
2	Greater Baton Rouge area	73
3	Houma -Thib; River parishes	6
4	Acadiana	1
5	Southwest Louisiana	8
6	Central Louisiana	5
7	Northwest Louisiana	2
8	Northeast Louisiana	10
9	Florida Parishes	78
Unknown		1
Total		222

Table: Regional distribution of West Nile Virus in Louisiana

Figure 1: Prevalence of human cases of West Nile Virus, September 5, 2002



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of Public Health. Veterinarians are required to report all cases of suspected viral encephalitis to the state veterinarian. Veterinarians are also encouraged to submit sera on all suspect horses to the LVMDL for analysis. The Infectious Disease Epidemiology Section maintains the database on all horses found to be positive and is presently acquiring geographic information on all equine cases. As of August 31, 2002, the state veterinarian is reporting a total of 241 positive horses within the state. Although geographic information is incomplete, cases have occurred in at least 21 parishes, (Figure 3).

The dead bird surveillance program has functioned admirably, resulting in submissions of blue jays, crows, and raptors that have (*Continue on next page*)

West Nile Virus Activity, Louisiana (Cont)

tested positive for West Nile virus. More importantly, mortality in birds seems to have predated suspected human cases in many areas of the state, suggesting that bird surveillance is an accurate method of predicting and warning of potential activity in humans. Some mist netting of live birds has also resulted in confirmation of West Nile activity in live birds. Most of these live bird captures have been carried out in East Baton Rouge parish. To date, 222 birds have tested positive for West Nile virus in 39 of Louisiana's 64 parishes.

The mosquito control agencies around the state conduct surveillance of sentinel chicken flocks, as well as, monitoring mosquito pools for viral activity. Four hundred eighty-eight sentinel chickens have tested positive in 18 Louisiana parishes and to date, West Nile virus has been found in 226 mosquito pools from twelve Louisiana parishes. The primary mosquito species identified has been *Culex quinquefasciatus*, but pools of *Aedes albopictus*, *Anopheles crucians*, *Coquillettidia perturbans*, *Culex nigripalpus*, *Culex salinarius*, and *Psorophora columbia* have also been identified. These positive mosquito pools confirm the potential of the virus to be transferred in several different habitats at various times of day due to the differences in breeding and feeding activity between the various species.

The Office of Public Health will continue monitoring West Nile

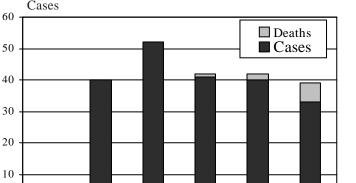


Figure 2: West Nile Virus by age, Louisiana

Figure 3: Equine West Nile cases confirmed thru 9/3/2002; 241 Total

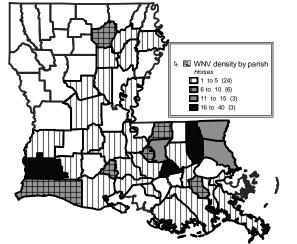
Age groups

45-59

60-75

75 +

30-44



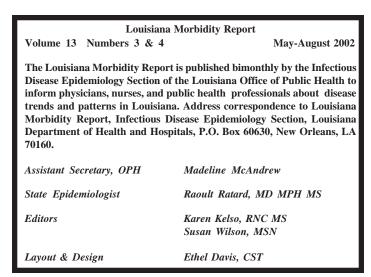
activity for the remainder of the season. Several suspect human cases are presently being investigated. The agency initiated a public education campaign in mid-July, informing the general public regarding the dangers of the virus and the recommended methods of prevention.



HIPAA Permits Disclosure of Patient Information Required by Louisiana Law

HIPAA Requirements

The new HIPAA requirements as part of the National Standard to Protect the Privacy of Personal Health Information make it clear that the privacy of individuals is paramount. This has made many mandatory disease reporters very anxious when it comes to reporting a particular disease to the State Office of Public Health. It is important for reporting health care professionals to know that the law does recognize that certain uses of individually identifiable information are appropriate, and do not compromise the privacy of the individual. The Department of Health and Human Services (HHS) permits certain existing disclosures of health information without



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individual authorization when that information is needed to keep the health care system operating smoothly. According to the Standards for Privacy of Individually Identifiable Health Information, Final Rule, "The final rule continues to permit covered entities to disclose protected health information without individual authorization directly to the public health authorities...under the final rule, a covered entity that is acting as a public health authority-for example, a public hospital conducting infectious disease surveillance in its role as an arm of the public health departmentmay use protected health information in all cases for which it is allowed to disclose such information for public health activities..." Public health activities such as the collection and reception of information to prevent disease, maintaining vital statistics, and the conduction of public health surveillance and investigations are covered by this guideline. HIPAA permits the disclosure of protected patient information if required by mandatory state reporting laws, and virtually all states, including Louisiana, have mandatory reporting laws (as seen in previous section). You can find the above information in Section 164.512 (b)-Uses and Disclosures for Public Health Activities in The Standards For Privacy.

HHS has also set up standards for electronic transactions and codes sets. In fact, HHS is promoting the greater use of electronic transactions in order to eliminate inefficient paper systems. The new Reportable Disease Database (RDD) currently being implemented by the Office of Public Health is in accordance with these standards. Transactions made over the Internet on the RDD are protected by a password and are completely secure.

For more information on the HIPAA requirements and how they relate to state law, you may go to the following helpful website:

<u>AMA</u> www.ama-assn.org

References:

Brown, Matthew K. et al *Confidentiality of Medical Records in Louisiana*. New Orleans, Lorman Education Services, 2002. www.lorman.com

Part II 45 CFR Parts 160 & 164 Standards for the Privacy of Individually Identifiable Health Information, Final Rule. DHHS, Office of the Secretary, 2000

Changes in TB Treatment

Louis Trachtman, MD, MPH and Keith L. Winfrey, MD, MPH

In response to two articles published by the Centers for Disease Control (CDC) and Prevention regarding adverse events of rifampin-based therapy for tuberculosis (TB), the medical advisory committee of the Governor's Tuberculosis Task Force has decided to send this notification to Louisiana health care providers informing them of the CDC's recommendations.

In the first article, Acquired Rifampin Resistance in Persons with Advanced HIV Disease Being Treated for Active Tuberculosis with Intermittent Rifamycin-Based Regimens, the CDC reports on the results of their TB Trials Consortium (TBTC) Study 23 which evaluated the intermittent rifabutin-based therapy for treatment of TB in HIV patients. Because adverse drug-drug interactions compli-

cate the concurrent use of rifamycins and protease inhibitor drugs in persons with active TB, who are also infected with human immunodeficiency virus (HIV-TB), CDC recommended the use of rifabutin in place of rifampin in multidrug regimens for the treatment of active TB in HIV-TB. Rifabutin can be administered with antiretroviral treatment regimens that include protease inhibitors (1,2). The twice-weekly intermittent therapy was included in these recommendations.

Prior to the CDC initiated study, intermittent rifabutin-based regimens had not been evaluated in clinical trials of HIV-TB. On March 6, TBTC's Data and Safety Monitoring Board (DSMB) advised CDC to suspend enrollment in study 23 because of the occurrence of acquired rifamycin resistance among 5 case-patients enrolled in the study. All five patients with failure/relapse had acquired rifamycin resistance. In the study, common features in patients with acquired rifamycin resistance were very low CD4 cell counts (all <60/mm3) at TB diagnosis and receipt of twice-weekly therapy during the intensive phase. A relation appears to exist between the frequency of dosing and the risk for acquired rifamycin resistance. In several other studies, patients with acquired rifamycin resistance had very low CD4 cell counts at the time of TB diagnosis (3,4). According to the CDC, the consistency of these findings suggests that once-or-twice-weekly therapy including isoniazid and rifamycin increases the risk for acquired rifamycin resistance among TB patients with advanced disease. Their new recommendation is that persons with HIV-TB and CD4 cell counts <100/mm3 should not be treated with highly intermittent regimens. These patients should receive daily therapy during the intensive phase, and during the continuation phase, treatment should consist of daily therapy or three doses a week. In this group, CDC also recommends directly observed therapy for both daily and three dose regimens. CDC does not advise additional action at this time for patients with advanced HIV disease who have completed TB therapy with intermittent regimens and are clinically stable. However, clinicians should treat suspected relapse in such patients with regimens active against rifamycin-resistant TB until results of susceptibility testing are available; and for HIV-TB patients a regimen active against rifamycinresistant TB until results of susceptibility testing are available. For HIV-TB patients with CD4 cell counts <100/mm3 who are being treated with twice-weekly rifamycin-based therapy, CDC recommends more frequent therapy with the same agents (e.g., directly observed three to five days a week).

In the **State Tuberculosis Control Manual** (STCM), provided by the Louisiana Tuberculosis Control Program, revised Nov. 2001, recommendations for treatment of TB in patients with HIV infection or AIDS included INH and Rifampin (RMP) with an initial 2 months of Pyrazinamide. Ethambutol and Streptomycin were also recommended until drug susceptibility tests are available (page 27). INH and RMP were recommended for at least six months after conversion to negative sputum culture for the continuation phase. Directly Observed Therapy was considered essential for this group (which was also recommended by the CDC). Finally, close coordination with the HIV medical provider was considered imperative to address treatment issues (e.g., use of protease inhibitors etc.).

In cases of resistance to either INH or RMP, a combination of other effective drugs must be used. If drug resistance is suspected (*Continue on next page*)

Changes in TB Treatment (Cont)

but not confirmed at least 2 new drugs with which the organism has not previously been treated should be added until susceptibility results are available. In the presence of documented resistance to RMP, three or four drugs to which the organisms are susceptible should be used until cultures are negative. In the presence of drug resistance, decisions on drug combinations and duration of chemotherapy should be made on a case-by-case basis. The Regional TB Disease Investigation Specialist (DIS) supervisor must be notified if resistance is found (pages 26-27).

In the second article, Fatal and Severe Hepatitis Associated With Rifampin and Pyrazinamide for the Treatment of Latent Tuberculosis Infection - New York and Georgia, 2000, (Vol. 50/ No. 15 pp 289-290), the CDC presented two case-reports of patients with latent tuberculosis infection (LTBI) who had received treatment with Rifampin and Pyrazinamide. Neither patient had a previous history of liver disease or known injected drug use. Both cases illustrated that the usually well-tolerated regimens for LTBI occasionally can result in severe adverse effects and that clinical monitoring is crucial during treatment. In these cases, biochemical monitoring did not help to avoid severe liver injury and does not substitute for clinical monitoring. As a result of their report, CDC recommends that health-care providers instruct and frequently remind patients about the initial symptoms of hepatitis (e.g., fatigue, nausea, abdominal pain, and anorexia) and the importance of stopping medication if symptoms develop. In their case-reports, both patients continued taking their medicines while symptoms were developing, a phenomenon also reported for INH-associated hepati-

According to the STCM, the recommendation has been established that all patients on a treatment regimen be assessed monthly (or more frequently if necessary) for adverse reactions. Also, the patient should be advised that should there be development of any such signs or symptoms, during treatment of LTBI, he or she should immediately discontinue the drug and report to the public health nurse.

In the STCM it is also suggested that every person with significant exposure and every positive tuberculin reactor be treated for latent tuberculosis infection, since the risk of developing disease is lifelong. Treatment of latent tuberculosis infection is utilized to reduce the risk that TB infection will progress to disease. The current, most cost effective regimen recommendation is six months of INH daily for maximum benefit. For HIV positive patients and for children, nine months of INH daily to achieve maximum prevention. The task force in the past has recommended patients be assessed monthly (or more frequently if necessary) for adverse reactions, especially those persons with a positive tuberculin skin test since latent infection can persist for up to twenty years and presumably for life.

Once the decision has been made by the physician to place a person on LBTI treatment, monthly nurse assessment to monitor for drug side effects, compliance, etc., should be performed.

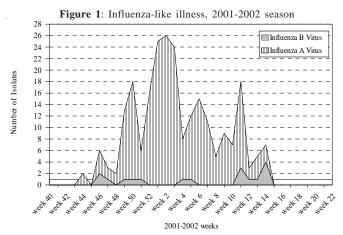
CDC's Division of Tuberculosis Elimination is interested in receiving reports of severe hepatitis in patients being treated for LTBI. Possible cases should be reported to (404) 639-8125.

A list of references are available upon request from the Tuber-culosis Control Section, 504-568-5015.

2001-2002 Influenza Season

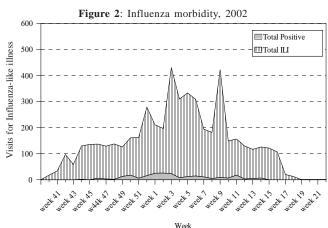
Cathy Scott, MPH

A total of 4,895 influenza-like illnesses was reported during the 2001-2002 influenza season. There were 241 confirmed cases reported, of which 224 (93%) were Type A and 17 (7%) were Type B (Figure 1). Influenza A (H3N2) virus predominated throughout the state, a pattern consistent with the U.S. West South Central region (includes Arkansas, Louisiana, Oklahoma, and Texas). However, Influenza B virus was reported more frequently in the Lafourche area early in the season (7/17). Data indicated that influenza morbidity peaked during middle-to-late February, about a month later than the previous year (Figure 2). The Influenza season was considered mild nationally, regionally and statewide.



The Office of Public Health Laboratory received 56 samples for viral isolation. Thirty-six percent were positive (19 type A and 1 type B). Twelve of the isolates submitted to the Centers for Disease Control and Prevention (CDC) were sub-typed as A/Panama/2007/99 like (H3N2). In addition to the viral isolations, 35 rapid tests were also received; seven were positive.

The success of the influenza surveillance system was due to the voluntary participation of the sentinel sites (46 sentinel physi-



cian sites, 25 hospitals, 17 schools and 19 nursing homes). The commitment to monitor and report flu-like symptoms and confirmed cases has been instrumental in achieving the national goal of one reporting sentinel site per 250,000 residents in the U.S.

2002-2003 Influenza Season

The trivalent influenza vaccine for the 2002-03 season will include A/New Caledonia/20/99-like (H1N1), A/Moscow/10/99-like (H3N2), and B/Hong Kong/330/2001-like viruses. The influenza B component of the vaccine will be an influenza B/Victoria lineage virus. For the A/Moscow/10/99-like virus, U.S. manufacturers will use the antigenically equivalent A/Panama/2007/99 virus, and for the B/HongKong/330/2001-like virus, they will use either B/Hong Kong/330/2001 or the antigenically equivalent virus B/Hong Kong/1434/2002. These viruses will be used because of their growth properties and because they are representative of currently circulating A (H3N2) and B viruses.

CDC has made the following changes and updates in the recommendations for the upcoming year:

- The optimal time to received influenza vaccine is during October and November. However, because of vaccine distribution delays during the past 2 years, ACIP recommends that vaccination efforts in October focus on persons at greatest risk for influenzarelated complications and health-care workers and that vaccination of other groups begin in November.
- Vaccination efforts for all groups should continue into December and later, for as long as vaccine is available.
- Because young, otherwise healthy children are at increased risk for influenza-related hospitalization, influenza vaccination of healthy children aged 6-23 months is encouraged when feasible. It is strongly recommended that children ≥ 6 months of age who have certain medical conditions be vaccinated.

A limited amount of influenza vaccine with reduced thimerosal content will be available for the 2002-2003 influenza season.

Prevalence of Physical Inactivity – Louisiana

Srikant Nannapaneni MPH

According to the Behavioral Risk Factor Surveillance System (BRFSS), in the year 2000, more than one in three (36.2%) adult Louisianans (US Median, 26.9%) reported no physical activity during the one month preceding the survey. Also, only 15% of the adult population reported being involved in regular and sustained physical activity (U.S Median, 21.8%) defined as respondents who reported physical activity for 30 or more minutes, five or more times per week regardless of intensity.

As seen in Table 1, females are more likely to be inactive compared to males and rates of physical inactivity are higher among African Americans compared to Whites. Rates of inactivity are also higher among individuals who are 25 years and older, individuals with an annual household income less than \$15,000 and in individuals with less than high school level of education. Prevalence of overweight and obesity is related to an individual's level of physical activity and according to BRFSS 2000, 61% of the inactive individuals were overweight (BMI = $25 Kg/m^2$).

Results from physical activity questions on the 2000 Louisiana Youth Tobacco Survey (LYTS), show that only 60% of the public middle school students (Grades 6-8) reported attending a physical

Table: Louisiana adults 18 years and older, who do not receive the recommended level of physical activity, BRFSS 2000

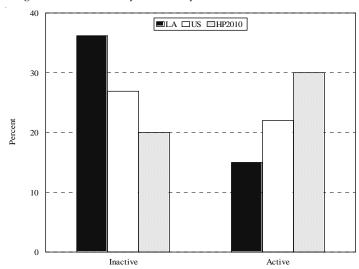
Groups	% Inactive/ Partially Active (Weighted Rate)	Groups	% Inactive/ Partially Active (Weighted Rate)
Total 85.3		Employment	
Sex		Employed	85.4
Male	84.0	Homemaker	83.6
Female	86.6	Unemployed	89.3
Age		Retired	85.5
19-24	81.7	Education	
25-44	86.5	Less than High School	87.7
45-64	85.7	High School Graduate	87.7
65+ 85.1		Some College	84.0
Income		College Graduate	79.3
<\$15,000	47.8	Race	
\$15,000-\$24,999	41.6	White	84.7
\$25,000-49,999		A.A.	87.6
=\$50,000	23.8		

education class five times a week and a majority (34.5%) of these students report that they spent only 10 minutes actually exercising. The rates are not significantly different across school grade, gender and race. Furthermore, 1 out of 5 middle school students (21.6%) spent more than 5 hours on an average school day watching television. The rates are higher among African American children (34%) compared to Whites (11.7%), and females (23.5%) compared to males (20%). Rates of the number of hours spent watching television each day did not differ significantly across school grades.

Patterns of health related behaviors are acquired during child-hood and adolescence and thus young people should be encouraged to engage in physical activity. Regular physical activity is known to reduce the risk of developing chronic diseases such as cardiovascular disease, diabetes, obesity and cancer. Regular physical activity has been shown to reduce depression and anxiety and is known to prevent osteoporosis in older adults. One of the national objectives for the year 2010 is to increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day to 30%.

The Louisiana Office of Public Health is currently developing a state cardiovascular health plan, which promotes physical activity among individuals of all ages in Louisiana through policy and environmental changes. For further information please contact the Louisiana Cardiovascular Health Program, at (504) 568-7210.

Figure: Prevalence of Physical Activity in Louisiana & US. BRFSS 2000



LOUISIANA COMMUNICABLE DISEASE SURVEILLANCE

March - Jun 2002

PROVISIONAL DATA

Table 1. Disease Incidence by Region and Time Period **HEALTH REGION** TIME PERIOD

DISEASE	0 -6.3 NA 0 +100 +33.3
Vaccine-preventable H. influenzae (type B) 0	0 -6.3 NA 0 +100 +33.3
Vaccine-preventable H. influenzae (type B) 0	0 -6.3 NA 0 +100 +33.3
H. influenzae (type B) 0 <th>-6.3 NA 0 +100 +133.3</th>	-6.3 NA 0 +100 +133.3
Hepatitis B Cases 25 8 2 2 1 1 0 0 2 2 43 41 59 63 Rate ¹ 2.4 1.3 0.5 0.4 0.4 0.3 0 0.6 0.4 1 1 1 1.3 1.4 Measles 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-6.3 NA 0 +100 +133.3
Rate ¹ 2.4 1.3 0.5 0.4 0.4 0.3 0 0.6 0.4 1 1 1 1.3 1.4 Measles 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	NA 0 +100 +100 +33.3
Measles 0 </td <td>0 +100 +100 +33.3</td>	0 +100 +100 +33.3
Mumps 0 0 0 0 0 0 0 0 0 0 1 0 Rubella 1 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 0 1 0 0 0 0 0 0 5 0 6 4 4 Sexually-transmitted HIV/AIDS Cases² 117 84 6 24 14 30 24 18 13 330 375 503 566	+100 +100 +33.3
Rubella 1 0 0 0 0 0 0 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 6 4 4 Sexually-transmitted HIV/AIDS Cases ² 117 84 6 24 14 30 24 18 13 330 375 503 566	+100 +33.3
Pertussis 2 0 1 0 0 0 0 2 0 5 0 6 4 Sexually-transmitted HIV/AIDS Cases ² 117 84 6 24 14 30 24 18 13 330 375 503 566	+33.3
Sexually-transmitted HIV/AIDS Cases² 117 84 6 24 14 30 24 18 13 330 375 503 566	
HIV/AIDS Cases ² 117 84 6 24 14 30 24 18 13 330 375 503 566	11.0
	110
Rate ¹ 11.3 13.9 1.6 4.4 4.9 10.0 4.0 5.1 3.0 7.4 8.4 11.3 12.1	-11.0
	7 NA
Gonorrhea Cases 1186 355 190 326 160 191 1049 268 222 3947 4217 5773 611	3 5.5
Rate ¹ 114.7 58.8 49.5 59.5 56.5 63.4 200.7 78.5 49.3 88.3 94.4 100.5 106.	6 NA
Syphilis (P&S) Cases 5 10 6 15 1 0 3 0 4 44 51 45 68	-34
Rate ¹ 0.5 1.7 1.6 2.7 0.4 0 0.6 0 0.9 1 1.1 1.0 1.5	NA
Enteric .	
Campylobacter 6 9 0 5 0 0 0 7 3 30 56 47 71	-34
Hepatitis A Cases 22 4 1 2 0 0 0 4 1 34 40 46 56	-18
Rate ¹ 2.1 0.70 0.3 0.4 0 0 0 1.2 0.2 0.8 0.9 1.0 1.3	NA
Salmonella Cases 32 30 20 18 13 4 3 12 13 145 246 223 310	-28
Rate ¹ 3.1 5 5.2 3.3 4.6 1.3 0.6 3.5 2.9 3.2 5.5 5.0 6.9	NA
Shigella Cases 33 18 22 2 2 7 9 2 4 99 101 179 139	+22
Rate ¹ 3.2 3 5.7 0.4 0.7 2.3 1.7 0.6 0.9 2.2 2.3 4.0 3.1	NA
Vibrio cholera 0 0 0 0 0 0 0 0 0 0 0 0 0	0
Vibrio, other 2 1 2 2 2 1 0 0 3 13 17 14 17	-18
<u>Other</u>	
H. influenzae (other) 0 1 0 0 0 0 1 0 2 5 3 6	-50
N. Meningitidis 6 4 0 3 1 3 0 0 0 17 33 26 55	-53
Tuberculosis 25 5 8 10 4 2 10 7 5 76 107 138 165	-16

^{1 =} Cases Per 100,000

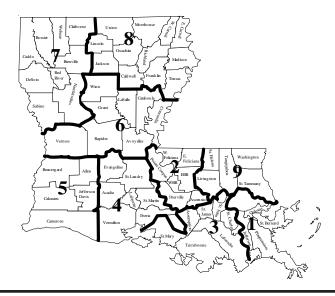
2=These totals reflect persons with HIV infection whose status was first detected during the specified time period. This includes persons who were diagnosed with AIDS at time HIV was first detected.

Table 2. Diseases of Low Frequency

<u>Disease</u>	Total to Date
Legionellosis	2
Lyme Disease	2
Malaria	2
Rabies, animal	3
Varicella	19

Table 3. Animal rabies (March-June)

<u>Parish</u>	No. Cases	Species
Acadia	1	Skunk
Calcasieu	1	Horse
Calcasieu	1	Bat



Annual Summary Shigellosis, 2001

In 2001 the Infectious Disease Epidemiology section reported 256 (5.7 per 100,000) cases of shigella statewide. This represents a 15% decrease from the previous year (Figure 1). Fifty-six percent of the cases occurred among infants and children (Figure 2). This is consistent with what would be expected given the route of transmission and the frequently undeveloped hygiene habits practiced by children. No deaths were reported among the cases. In addition no outbreaks associated with Shigella were reported or investigated in the state for 2001. Among cases with available day care information, 3% of the cases attended day care.

Figure 1: Cases of Shigellosis by year 1992-2001

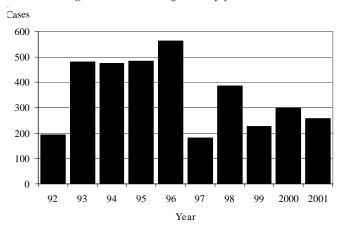
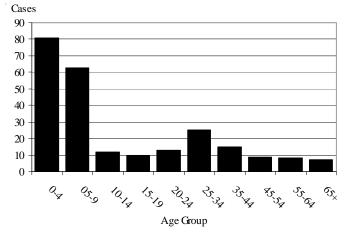


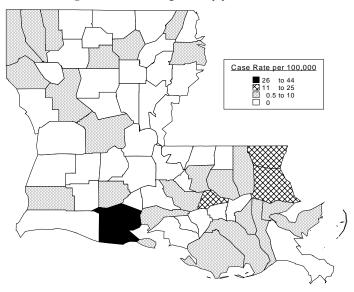
Figure 2: Cases of Shigellosis by age group, 2001



As with other enteric illnesses, there is a marked seasonality with cases occurring mostly during the summer months. *Shigella sonnei* was the most frequently identified serotype accounting for 56% of the cases tested. One case of *Shigella flexneri* was also identified. Parishes reporting the highest case rates per 100,000 were: Vermilion (42), St. Tammany (19) and Washington 12; [Figure 3].

Shigellosis is an enteric illness caused by infection with the *Shigella sp.* bacteria. The bacteria is transmitted via the fecal-oral route. The disease is characterized by an abrupt onset with diarrhea,

Figure 3: Cases of Shigellosis by parish, 2001



fever, occasionally toxemia, vomiting, cramps and tenesmus. Unlike other enteric pathogens such as salmonella, infection with shigella often produces bloody diarrhea. The incubation period for Shigella can range from 12-96 hours but is typically 1-3 days. Patients are most infectious when acutely ill (with symptoms) and can transmit the bacteria until it is eliminated from the stool, usually 4 weeks after the onset of illness. Treatment with antibiotics can reduce the carriage period.

The Louisiana Office of Public Health, State Laboratories, participate in the National Antimicrobial Resistance Monitoring System (NARMS) for Enteric Bacteria. NARMS is a collaboration between the Centers for Disease Control and Prevention (CDC), state and local health departments, and the United States Food and Drug Administration's Center for Veterinary Medicine (FDA-CVM). The purpose of the program is to monitor nationwide antimicrobial resistance patterns among foodborne enteric bacteria isolated from humans. Key findings among the isolates tested in 2000 indicate that there is an increasing trend of antibiotic resistance among Shigella isolates tested nationwide. The following antibiotics were found to have the highest resistance: Ampicillin (78.9%), Streptomycin (57.2%), Sulfamethoxazole (55.9%), Trimethoprim-Sulfamethoxazole (53.0%), and Tetracycline (44.8%). The Louisiana Office of Public Health State Laboratories have the capacity to serotype shigella isolates and encourage health care workers to submit Shigella samples to the State Laboratories for testing. There is no fee for the serotyping.

Louisiana Fact

The world's first successful transmission of leprosy to a laboratory animal (armadillo) was performed by Dr. Eleanor E. Storrs at New Iberia in 1971.

Reference: Louisiana Almanac

Sanitary Code - State of Louisiana Chapter II - The Control of Disease

"It is hereby made the duty of every physician practicing medicine in the State of Louisiana to report to the State Health Officer, through the Health Unit of the parish or municipality wherein such physician practices, any case of suspected case of reportable disease which he is attending, or has examined, or for which such physician as prescribed. The report shall be made promptly at the time the physician first visits, examines or prescribes for the patient, and such report shall state the name, age, sex, race, usual residence, place where the patient is to be found, the nature of the disease and the date of onset." In addition to physician reporting, laboratories are required to report the results of tests which either confirm or suggest the occurrence of reportable diseases as specified by law. Additionally, Section 2:006 states "It shall be the duty of every osteopath, coroner, medical examiner, dentist, homeopath, infection control practitioner, medical records director, nurse, nurse midwife, nurse practitioner, pharmacist, physician assistant, podiatrist, social worker, veterinarian, and any other health care professional to report a confirmed case of reportable disease as specified in Section 2:003 in which he or she has examined or evaluated, or for which he or she is attending or has knowledge."

2:003 The following diseases are hereby declared reportable with reporting requirements by Class:

Class A Diseases/Conditions - Reporting Required Within 24 Hours:

Diseases of major public health concern because of the severity of disease and potential for epidemic spread—<u>report by telephone immediately</u> upon recognition that a case, a suspected case, or a positive laboratory result is known: [in addition, all cases of rure $or\ exotic\ communicable\ diseases,\ unexplained\ death,\ unusual\ cluster\ of\ disease\ and\ all\ outbreaks\ shall\ be\ reported.]$

Typhoid Fever

Haemophilus influenzae (invasive infection) Anthrax Rubella (German measles) Botulism Measles (rubeola) Rubella (congenital syndrome)

Brucellosis Neisseria meningitidis (invasive infection) Smallpox Cholera Plague Tularemia

Diphtheria Rabies (animal & man) Viral Hemorrhagic Fever

Class B Diseases/Conditions - Reporting Required Within 1 Business Day:

Diseases of public health concern needing timely response because of potential of epidemic spread ort by the end of the next business day after the existence of a case, a suspected case, or a positive laboratory result is known. Arthropod-borne encephalitis Hepatitis A (acute illness) Pertussis Aseptic meningitis Hepatitis B (carriage in Chancroid¹ pregnancy) Shigellosis E. Coli 0157:H7 Herpes (neonatal) Syphilis1 Hantavirus Pulmonary Legionellosis Tetanus Syndrome Malaria Tuberculosis2

Mumps $\underline{Class\ C\ Diseases/Conditions\ -\ Reporting\ Required\ Within\ 5\ Business\ Days:}$

ses of significant public health concern—report by the end of the work week after the existence of a case, suspected case, or a positive laboratory result is known.

Acquired Immune Deficiency Staphylococcus aureus, Methicillin/ Syndrome (AIDS) Gonorrhea¹ oxacillin or vancomycin resistant Blastomycosis (MRSA) Hansen Disease (leprosy)

Campylobacteriosis Hepatitis B (acute) Streptococcus pneumoniae Chlamydial infection¹ Hepatitis C (acute) (invasive infection; penicillin

Cryptococcosis Human Immunodeficiency resistant (DRSP) Cryptosporidiosis Virus (HIV) Streptococcus pneumoniae (invasive infection in children < 5 years of age) Cyclosporiasis

Lyme Disease Dengue Varicella (chickenpox) Vibrio infections (except cholera)

EHEC serogroup non 0157 EHEC + shiga toxin not serogrouped Lymphogranuloma venereum1 Psittacosis

Enterococcus, Vancomycin Rocky Mountain Spotted Fever

Resistant: (VRE) (RMSF)

Other Reportable Conditions:

Hemolytic-Uremic Syndrome

Sickle cell disease (newborns)* Lead Poisoning* Complications of abortion Phenylketonuria* Spinal cord injury* Reye's Syndrome Sudden infant death Congenital hypothyroidism* Galactosemia Severe traumatic head injury** syndrome (SIDS) Hemophilia* Severe undernutrition (severe anemia, failure to thrive)

Case reports not requiring special reporting instructions can be reported by Confidential Disease Case Report forms EPI-2430, facsimile (504-568-5006),

phone reports (504-568-5005 or 1-800-256-2748), or electronic transmission.

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Report on STD-43 form. Report cases of syphilis with active lesions by telephone.

²Report on CDC72.5 (f.5.2431) card.

^{*}Report to the Louisiana Genetic Diseases Program Office by telephone (505) 568-5070 or FAX (504) 568-7722.

^{**}Report on DDP-3 form; preliminary phone report from ER encouraged (504) 568-2509. Information contained in reports required under this section shall remain confidential in accordance with the